# Climate Action Revenue Incentive Program (CARIP) Public Reporting - Carbon Neutral Progress Survey 2014

As part of the provincial Climate Action Revenue Incentive Program (CARIP), the Capital Regional District (CRD) is required to report annually to the Province and publically on our climate actions. Below is our final report, submitted to the Province on May 29, 2015.

#### **BROAD PLANNING**

Broad Planning refers to the high level, strategic planning that sets the stage for GHG reductions. Land use planning that focuses on Smart Growth principles (compact, complete, connected and centred) plays an especially important role in energy and GHG reduction.

	Yes	No	Please specify or comment
Since initially establishing OCP targets, policies, and actions for the reduction of greenhouse gas (GHG) emissions, as required by the Local Government Act, has your local government updated those targets, policies and actions?	True	False	Actively working on updating policies and actions. Reviewing targets through current Regional Sustainability Plan process.

Variable

Does your local government use the Community Energy and Emissions Inventory (CEEI)
to measure progress?

Has your local government established Development Permit Areas (DPAs) for climate action (i.e. energy conservation, water conservation and/or GHG emission reduction)?

No

#### **CORPORATE - Broad Planning**

Actions taken Actions proposed for 2015 in 2014

Feasibility Studies, - Review of Greenhouse Gas (GHG) policies that aim to

Research, Analysis
Plans, Policies,
Regulations

contribute to	corporate	GHG reductions.
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- Corporate strategic planning process.

# **COMMUNITY-WIDE - Broad Planning**

#### Actions proposed for 2015

Feasibility Studies, Research, Analysis	- Began project to review municipal government best 'climate' practices from around the world (corporate and community).	
Plans, Policies, Regulations	- Ongoing land acquisition strategy to purchase forested lands for carbon sequestration Regional Sustainability Strategy (continuation) Development of Regional Transportation Plan Development of a Regional Food & Agriculture Sub-Strategy Drafting of the Community Health and Wellbeing Plan.	<ul> <li>- Development of a Climate</li> <li>Action Blueprint for CRD.</li> <li>- Ongoing land acquisition</li> <li>strategy to purchase forested</li> <li>lands/carbon sequestration.</li> <li>- Completion of Regional Food &amp;</li> <li>Agriculture Sub-Strategy.</li> </ul>
Policy Implementation		<ul><li>- Adoption process of Regional Sustainability Strategy.</li><li>- Adoption of Community Health and Wellbeing Plan.</li></ul>

#### **BUILDINGS**

Low-carbon buildings use the minimum amount of energy needed to provide comfort and safety for their inhabitants, and tap into renewable energy sources for heating, cooling and power. These buildings can save money, especially viewed over the long term.

Response

#### Variable

Does your local government have green building/construction policies, plans or	
programs?	

No

# **CORPORATE - Buildings**

Actions taken in 2014

Actions proposed for 2015

Physical
Improvements,
Construction

 Use of low -VOC interior 100% acrylic latex paint in parks buildings.
 Use of power saving - Continue the use of low-VOC interior 100% acrylic latex paint in parks buildings.

- LED lighting upgrade at SEAPARC.

	plugs and power bars for equipment left plugged in.  - Use of energy efficient CFL and LED lighting Implement an energy management program.	- Replace existing under water pool halogen lighting with LED fixtures at Panorama Recreation Centre Refrigeration plant conversion from Freon -22 to Ammonia based refrigerant Implement an energy management program High efficiency boiler installation at Kings.
Feasibility Studies, Research, Analysis	- Planning to replace aging complex care facilities.	- Investigate all funding opportunities towards future implementation of LED lighting for Panorama Recreation facility and parking lots Design work on new complex care facility Work with VIHA towards implementing energy management program for VIHA leased facilities Investigate grant opportunities for building energy assessments and upgrades.
Plans, Policies, Regulations	- Engaged VIHA to implement energy management program in their leased facilities.	
Employee Training, Awareness	- Continue encouragement of energy saving behaviors.	- Continue encouragement of energy saving behaviors.
Committees, Staffing		- Establishment of Building Facilities Managers User Group.

# **COMMUNITY-WIDE - Buildings**

	Actions taken in 2014	Actions proposed for 2015
Community Education, Engagement	- Promotion of available incentive programs for residents (i.e. HERO, Solar Colwood/CRD, etc.).	- Promotion of available incentive programs for residents (i.e. HERO, Solar Colwood/CRD, etc.).
Funding	- Solar hot water grants for CRD residents Upgrades to multiple healthcare facilities.	<ul> <li>Solar hot water grants for CRD residents (first quarter) Upgrades to multiple healthcare facilities.</li> </ul>

#### **ENERGY GENERATION**

A transition to renewable or low-emission energy sources for heating, cooling and power supports large, long-term GHG emissions reductions. Renewable energy including waste heat recovery (e.g.

from biogas and biomass), geo-exchange, micro hydroelectric, solar thermal and solar photovoltaic, heat pumps, tidal, wave, and wind energy can be implemented at different scales, e.g. in individual homes, or integrated across neighborhoods through district energy or co-generation systems.

Variable	Response
Has your local government undertaken district energy projects in 2014?	No
Has your local government undertaken renewable energy projects 2014?	Yes
Are you aware of the integrated resource recovery (IRR) guidance page on the BC Climate Action Toolkit? (http://www.toolkit.bc.ca/tool/integrated-resource-recovery-ire	Yes

## **CORPORATE - Energy Generation**

Actions taken in 2014

#### Physical Improvements, Construction

- Continue to generate electricity from landfill gas and optimize gas capture by installing 11 and commissioning 15 new gas wells. Undertake heat recovery at headquarters data centre. Continued heat recovery at Saanich Peninsula Waste Water Treatment Plant.
- Energy capture project at Sooke Water Treatment Plant. - Continued heat recovery at Panorama Recreation Centre. - Install solar panels at Juan de Fuca administration building.

#### Actions proposed for 2015

- Optimize landfill gas capture with goal of 75% capture rate by 2016.
- Continue heat recovery project at headquarters data centre. - Continued heat recovery at Saanich Peninsula Waste Water Treatment Plant.
- Continued heat recovery at Panorama Recreation Centre.
- Continue energy capture project at Sooke Water Treatment Plant.

# **COMMUNITY-WIDE - Energy Generation**

Actions taken in 2014

Actions proposed for 2015

Physical Improvements, Construction

- Brush pile from invasive species removal processed into biofuel.

- Brush pile from invasive species removal processed into biofuel.

#### **GREENSPACE**

Greenspace refers to parks and greenways, boulevards, community forests, urban agriculture, riparian areas, gardens, recreation/school sites, and other green spaces, such as remediated brownfield/contaminated sites. Greenspaces support climate change mitigation (reducing emissions by absorbing and sequestering GHG) and adaptation (providing shade, cooling, deflecting strong wind, and improving air quality).

Does your local government have urban forest policies, plans or programs?

Yes

# **COMMUNITY-WIDE - Greenspace**

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	- Planting of 150 indigenous trees along regional trails Remediation of contaminated site at Thetis Lake Pistol Range.	- Continue restoration of aquatic habitat in Seagirt Ponds Community Park (East Sooke).
Feasibility Studies, Research, Analysis		<ul> <li>Investigate the opportunity to expand the Allotment Garden at Greenglade Community Centre.</li> </ul>
Community Education, Engagement	- Native Plant Workshops promoting drought tolerant plants, replacing of high water use lawns, increasing food security, and composting.	<ul> <li>Continue native plant workshops.</li> <li>Partnership with Gorge Tillicum</li> <li>Community Association to include technical and financial support for Community Garden.</li> </ul>

#### **SOLID WASTE**

Reducing, reusing, recovering and managing the disposal of the residual solid waste minimizes environmental impacts and supports sustainable environmental management, greenhouse gas reductions, and improved air and water quality.

Variable	Response
Does your local government have construction and demolition waste reduction policies, plans or programs?	Yes
Does your local government have organics reduction/diversion policies, plans or programs?	Yes

#### **CORPORATE - Solid Waste**

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements,	- Purchase & use of sign making Printer/Cutter, that uses "Eco-Solvent" (Low Volatile Organic	- Moving to electronic agendas for Board and Standing
Construction	Compounds (VOC), Non-toxic)Re-use vinyl sign liner-paper as packaging. Save and re-	Committee meetings.
	purpose paper roll ends.	

	- Source recycled/recyclable materials, i.e.: use a rigid paper-based recyclable rigid display board instead of plastic materials.	
Feasibility Studies, Research, Analysis		<ul> <li>Investigate replacement of waste contracted service providers to those that have sustainability program and policies.</li> </ul>
Policy Implementation	- Implemented digital version of Cross Connection form.	- Provide electronic/paperless internal correspondence.
Employee Training, Awareness	<ul> <li>Regional Parks initiative to encourage staff to bring in cardboard, paper, styrofoam, plastic, electronics, organic materials for recycling.</li> <li>Staff encouraged printing double-sided and avoiding use of colour printing wherever possible.</li> <li>Increased signage at waste and recycling receptacles.</li> </ul>	<ul> <li>Continue Regional Parks</li> <li>initiative to encourage staff to</li> <li>bring in materials for recycling.</li> <li>Encouragement to reduce</li> <li>waste and engage in proper</li> <li>recycling.</li> </ul>
Committees, Staffing	- Internal Regional Parks Recycling Committee initiated.	- Continuation of Regional Parks Recycling Committee.

# **COMMUNITY-WIDE - Solid Waste**

TIPE Solid Waste		
Actions taken in 2014	Actions proposed for 2015	
- Publications available online or by email	- Pacyclable materials collected	

Physical Improvements, Construction	- Publications available online or by email to reduce printing (e.g. annual reports, parks guides etc.) Dumped recyclable materials collected in the parks and taken to recycling depots (bottles, cans, metal) Installed water fountains along the Galloping Goose Regional Trail to reduce use of bottled water Expanded the kitchen scraps transfer station at Hartland landfill.	<ul> <li>Recyclable materials collected in the parks are recycled (bottles, cans, metal).</li> <li>Production/updating of web-based maps of parks and trail to make them easier to download onto mobile devices.</li> </ul>
Feasibility Studies, Research, Analysis	- Conducted a request for expression of interest for an in-region facility for processing of kitchen scraps.	- Continue to pursue an in-region processing option for kitchen scraps.
Policy Implementation		- Ban kitchen scraps from disposal at Hartland landfill.
Community Education, Engagement	- Illegal Dumping Awareness Strategy in parks Added links to website and permit applications to "My Recyclopedia".	

- Provided education and outreach component of the Kitchen Scraps program.

**Funding** 

- Provided a diversion incentive for kitchen scraps generated in the region.

#### **TRANSPORTATION**

Transportation actions that increase transportation system efficiency, emphasize the movement of people and goods, and give priority to more efficient modes, e.g. walking, cycling, ridesharing, and public transit, can contribute to reductions in greenhouse gas emissions and more livable communities.

Variable Response

Does your local government have policies, plans or programs to support alternative modes and technologies of transportation (e.g. walking, cycling, transit, electric vehicles)	Yes
Does your local government have a transportation demand management (TDM) strategy? (http://www.toolkit.bc.ca/resource/transportation-demand-management-small-and-mid-sized-communities-toolkit)	Yes
Does your local government have policies, plans or programs to support local food production (thus reducing transportation emissions)?	Yes

# **CORPORATE - Transportation**

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	- Offer ability to teleconference into meetings Replaced four vehicles with lower emission vehicles Contractor's diesel roll-off bin hauling trucks changed for a CNG powered truck Some trail inspections done on bicycle rather than motorized vehicle Coordination of staff meetings and group travel to Headquarters.	<ul> <li>Installation of Skype capability in meeting rooms.</li> <li>Replacement of two trucks with more fuel efficient diesel engines at regional parks.</li> <li>Curbside contractor's recycling collection trucks being replaced with CNG fueled vehicles.</li> </ul>
Feasibility Studies, Research, Analysis	<ul> <li>- Undertook sector by sector and coordinated approaches review to reduce corporate travel.</li> <li>- Introduced work at home initiative in Partnerships division.</li> <li>- Spatial Mapping tools for inspection</li> </ul>	<ul> <li>Participation in E3 fleet review and GHG reduction assessment.</li> <li>E-Bike pilot project for inspections.</li> <li>Investigate an Active Transportation Plan for After School Program at Greenglade Community</li> </ul>

	planning to optimize travel planning.	Centre Investigate funding opportunities for fleet pilot project.
Policy Implementation	- Local vendors used wherever feasible to reduce transportation No idling policy on Regional Parks vehicles.	
Employee Training, Awareness	- Staff encouraged to carpool/take transit Utilized mobile computer and communication devices for inspection staff to maximize connectivity and minimize return office visits Trip reduction through car-pooling and use of appropriate sized vehicles Participate and support Bike to Work Week.	- Continue 2014 actions.

# **COMMUNITY-WIDE - Transportation**

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	- Increased parking area for "Park-n-Ride" at Atkins Road to encourage transit use Creation of 1.66 km of E&N Rail trail (a cycling & pedestrian trail) 1 km Multi-Use Trail connecting 5 public schools, from SEAPARC Leisure Complex to the western portion of Sooke.	- Pursue permits and Statutory Rights of Way for development of alternate transportation hiking/cycling route (trail) through Otter Point Phase 2: creation of a further 2.17km of E&N Rail trail Completion of Sooke Bike Park project.
Feasibility Studies, Research, Analysis	- 2014 Transportation Data Collection Program: Cycling & Traffic.	<ul> <li>Bicycle Account: A report on the economic impact of cycling in the capital region.</li> <li>Cycling Circle Route Mapping project.</li> </ul>
Plans, Policies, Regulations	- In partnership with the Southern Gulf Islands Economic Development Commission, prepared the draft Southern Gulf Island Cycle and Pedestrian trail plan Development of Regional Cycling Wayfinding Guidelines.	
Community Education, Engagement	<ul> <li>"Cruise with Courtesy" campaign.</li> <li>Design and printing of the 2014 Regional Cycling Map Ride on Cycling Skills courses for adults and children.</li> </ul>	- SEAPARC cycling skills event.
Funding	- Innovative cycling infrastructure funding program for local governments & electoral areas Active Transportation Special Event Funding Program.	

 Regional Cycling Wayfinding Signage Funding Program.

#### **WATER and WASTEWATER**

Managing and reducing water consumption and wastewater is an important aspect of developing a sustainable built environment that supports healthy communities, protects ecological integrity, and reduces greenhouse gas emissions.

Response

#### Variable

Does your local government have water conservation policies, plans or programs?

Yes

#### **CORPORATE - Water and Wastewater**

Actions taken in 2014

Actions proposed for 2015

#### Physical Improvements, Construction

- Flush toilets at, Hamsterly, Eagle and Beaver Beach and Thetis Lake are closed down for all except the summer months to save water. All other washrooms in the parks are pit toilets.
- Installation of water saving fixtures for pool showers at Panorama Recreation Centre.
- Installation of rain harvesting at the Juan de Fuca administration building and Salt Spring Island Library.
   Pipe replacement program
- Reducing Inflow and Infiltration to increase energy efficiency at Waste Water treatment plant. Use of energy efficient Variable Frequency Drives (VFD's) to reduce energy use at Waste Water treatment plants.

Feasibility Studies, Research, Analysis - Investigate all funding opportunities towards future implementation of water saving urinals and toilets for Panorama Recreation Centre and Green Glade facilities.

#### **COMMUNITY-WIDE - Water and Wastewater**

Actions taken in 2014

Actions proposed for 2015

Feasibility Studies,

- Provided water audit

- Grease Interceptor electronic tracking system pilot study to enhance Sewer Use

Research, Analysis	program to businesses.	Bylaw compliance monitoring.
Plans, Policies, Regulations		- Review Sewer Use Bylaw to include water conservation regulations.
Community Education, Engagement	<ul> <li>Promotion of wise and efficient use of water in residential buildings.</li> </ul>	- Promote "Just Ask" water conservation program to regions restaurants.
Funding	- Concluded "Once Through Cooling" rebate program.	- Tap by Tap Multi-Unit Residential Program for energy and water savings (partnership with Fortis BC).

# **OTHER CLIMATE ACTIONS**

This section is intended to give local governments a chance to record other climate actions that could not be captured in the above sectors, including climate change adaptation actions and air quality actions.

Variable	Response
Has your local government begun to integrate the impacts of a changing climate (adaptation) into its planning and operations?	Yes
Are you aware of the climate change adaptation guidance page on the BC Climate Action Toolkit? (http://www.toolkit.bc.ca/adaptation-challenges-and-opportunities)	Yes

# **CORPORATE - Other Climate Action**

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction	<ul> <li>Wildfire Prevention and Preparedness preventing large scale wildfires.</li> <li>Increased chipping of woody debris over burning for forest fuel management activities.</li> <li>Upgrading of drainage structures incorporating a 13% increase in peak flows to adapt to predicted climate changes.</li> </ul>	<ul> <li>Purchase of chipper, further diverts woody debris from direct combustion.</li> <li>Continue upgrading drainage structures incorporating a 13% increase in peak flows to adapt to predicted climate changes.</li> </ul>
Feasibility Studies, Research, Analysis	- Annual monitoring to detect forest insects/diseases and invasive species that could threaten forests and ecosystems in the GVWSA.	<ul> <li>Review of climate considerations in asset management process.</li> <li>Participate in Provincial Flood Hazard Land Use Guideline amendment consultation process.</li> <li>Annual monitoring to detect forest insects/diseases and invasive species</li> </ul>

		that could threaten forests and ecosystems in the GVWSA.
Employee Training, Awareness	- Staff participation in numerous training sessions and webinars on climate adaption.	<ul> <li>Invite staff to participate in external learning opportunities on various climate related topics.</li> </ul>
Committees, Staffing	- Gardening group for Fisgard Building green roof garden to promote food sustainability and supplement lunches.	

# **COMMUNITY-WIDE - Other Climate Action**

	Actions taken in 2014	Actions proposed for 2015
Physical Improvements, Construction		- Support outreach venues with green programs and climate change mitigation initiatives.
Feasibility Studies, Research, Analysis	- Initiation of CRD Coastal Sea Level Rise Risk Assessment Project Development of mapping showing impervious areas and tree cover per watershed.	<ul> <li>Completion of CRD Coastal Sea Level Rise Risk Assessment Project.</li> <li>Completion of sea level rise tool evaluation and training project.</li> <li>Drafting of Low Impact Development Guidelines specific to capital region.</li> </ul>
Plans, Policies, Regulations		
Policy Implementation		
Community Education, Engagement	- Implemented Green 365 Community Education and Outreach campaign with outdoor, indoor, kitchen/cooking, and spring cleaning components of integrated program messaging Participation and support of Youth Climate Action Summit and Off the Grid Festival Support of BCSEA Climate Change Showdown for regional elementary schools Climate Action To Go Kits (partnership with regional libraries and school districts) Purchase of green infrastructure models for outreach Hosted four Resilient Region Breakfasts Distributed 12 climate action e-newsletters to local government staff and elected officials.	- "One Window" approach to Divisional and Department outreach and Program specific outreach with integrated climate messaging Participation and support of Youth Climate Action Summit and Off the Grid Festival Support of BCSEA Climate Change Showdown for regional elementary schools Climate Action To Go Kits (partnership with regional libraries & school districts) Use of green infrastructure models Host four Resilient Region Breakfasts Distribute local government climate action monthly e-newsletter.

Funding	- Initiation of My Green High School plan	- Completion of My Green High School
	competition.	plan competition.

#### **MEASURING CORPORATE GHG EMISSIONS**

#### Did you measure your local government's corporate GHG emissions in 2014?

Yes, in 2014 the Capital Regional District (CRD) used SMARTTool, a web-based inventory and reporting tool, to track and measure our corporate GHG emissions.

#### REPORTING CORPORATE GHG EMISSIONS AND REDUCTIONS

A local government's Total Corporate GHG Emissions include direct and contracted GHG emissions that result from the delivery of "traditional services".

<u>Traditional services</u> - services that are commonly provided by a majority of local governments and include: administration and governance; drinking, storm and waste water; solid waste collection, transportation and diversion; roads and traffic operations; arts, recreation and cultural services; and fire protection. <u>Direct GHG emissions</u> - emissions that are generated by the delivery of a traditional service by local government staff or a subsidiary organization. <u>Contracted GHG emissions</u> - emissions that are generated by the delivery of traditional services by contractors on behalf of local governments.

# What were your local government's 2014 corporate GHG emissions from services delivered directly by your local government?

(in tonnes of carbon dioxide-equivalent, tCO2e)

2902

# What were your local government's 2014 corporate GHG emissions from contracted services?

(in tonnes of carbon dioxide-equivalent, tCO2e)

824

**Total Corporate GHG Emissions for 2014** = 3726.0 tCO2e

#### **Reporting Reductions and Offsets**

To be carbon neutral, a local government must:balance their TOTAL corporate GHG emissions by undertaking Option 1 (GCC-supported) or Option 2 (alternative) community GHG emissions reduction projects that meet project eligibility requirements; and/or;purchase carbon offsets from a credible offset provider.

# If applicable, please list the names of and report the 2014 GHG emissions reductions being claimed from Option 2 GHG Reduction Projects.

Option 2 Project Name

**GHG** Emissions Reduced

CRD Landfill Gas Emissions Reduction Project

3726

## **Reductions from Option 2 Projects = 3726.0 tCO2e**

#### **Corporate GHG Emissions Balance**

Your local government's Corporate GHG Emissions Balance is the difference between total corporate GHG emissions (direct + contracted emissions) and the GHG emissions reduced through GCC Option 1 and Option 2 projects and/or the purchase of offsets.

# **Corporate GHG Emissions Balance for 2014 = 0.0**

If your Corporate GHG Emissions Balance is negative or zero, your local government is carbon neutral. Congratulations!

Based on your local government's 2014 CARIP Public Report, please check the GCC Climate Action Recognition Program level that best applies:

Level 3 - Achievement of Carbon Neutrality

#### LOCAL GOVERNMENT INFORMATION

Variable	Response
LOCAL GOVERNMENT INFORMATION   Name of Local Government	Capital Regional District
LOCAL GOVERNMENT INFORMATION   Name of member Regional District (RD)	Capital
LOCAL GOVERNMENT INFORMATION   Regional Growth Strategy (RGS) in your region	Yes
LOCAL GOVERNMENT INFORMATION   Population	100,000+

# **Submitted by:**

Variable

Submitted by:   Name	Nikki Elliott
Submitted by:   Position	Climate Action Coordinator

Response

Submitted by: | Email nelliott@crd.bc.ca

Submitted by: | Telephone # (ten digit) 250-360-3048

Before submitting your survey, please ensure that it is your local government's complete and final 2014 Carbon Neutral Progress Survey. Please submit this survey only once.

Is this your local government's complete and final 2014 Carbon Neutral Progress Survey?

Yes